

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

**Appeal No.** \_\_\_\_\_

Application No.: 10/776,856

Filing Date: February 11, 2004

Applicant: Nagaraj Jayanth

Group Art Unit: 3744

Examiner: Chen Wen Jiang

Confirmation No.: 3884

Title: COMPRESSOR DIAGNOSTIC SYSTEM

Attorney Docket: 0315-000510/COD

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**REPLY BRIEF**

## **REMARKS**

### **A. SHAROOD ET AL AND WIGGS FAIL TO DISCLOSE MONITORING A MOTOR PROTECTOR AS A FUNCTION OF TIME**

Appellant submits that the combination of Sharood et al and Wiggs fails to teach or suggest monitoring a motor protector as a function of time. Sharood discloses monitoring a compressor run time in combination with a temperature within a refrigerator chamber to identify a door open condition. To the extent time is used, it is only to identify a possible door open condition if the compressor is detected as running for a predetermined period of time. Sharood does not disclose a motor protector. Wiggs discloses activating a first indicator light indicative of the activation of a high pressure switch (22) or activating a second indicator light indicative of the activation of a low-temperature switch (36) for use in diagnosing a cause of the shut-off of a compressor. Wiggs does not disclose monitoring either switch (22, 36) as a function of time. In particular, if either switch (22, 36) is activated, the corresponding indicator light is merely activated with no indication of the time of the activation or any other time-based monitoring. Therefore, the combination of Sharood et al and Wiggs fails to teach or suggest monitoring a motor protector as a function of time.

With regard to this claim limitation, in referring to Sharood, the Examiner merely states “[i]n regard to the ‘as a function of time’ argument, Examiner asserts that the diagnosis, monitoring and control processes are function of time.” (See Examiner’s Answer, page 4.) Similarly, with regard to Wiggs, the Examiner also merely “asserts that the diagnosis, monitoring and control processes are function of time.” (See Examiner’s Answer, page 4.) However, the Examiner fails to show where either Sharood or Wiggs

disclose monitoring a motor protector as a function of time. The Examiner's assertion is not supported by the cited references.

The Examiner asserts with respect to Sharood et al that "the compressor/motor is monitored through the retrofit plug because the appliance (refrigerator or HVAC) electrical supply line connected to the compressor/motor and Sharood et al disclose the retrofit plug is a plug-through device that is attached in line with the main appliance electrical supply." (See Examiner's Answer, p. 4.) In contrast, Appellant submits that it is the refrigeration system, including the temperature in the compartment, that is being monitored through the retrofit plug, and not the compressor motor. In addition, Sharood et al does not suggest a motor protector or monitoring of a motor protector, as claimed. The fact that the retrofit plug includes monitoring circuitry (see Examiner's Answer, p. 4) does not mean that the retrofit plug is a "motor protector." The mere measurement of current used by an appliance (see Examiner's Answer, p. 4) does not mean that the disclosed retrofit plug in Sharood et al is a "motor protector."

#### **B. THE COMINATION OF SHAROOD ET AL AND WIGGS IS IMPROPER**

Appellant maintains his argument that the modification of Sharood et al with Wiggs would render Sharood inoperable for its intended purpose. (See Appeal Brief, pages 10-11.) Particularly, Sharood et al disclose that if the compressor is on longer than expected and a rising temperature is detected in a refrigeration compartment, the retrofit plug (2650) may detect a door open condition. (See Sharood et al at col. 27, lines 59-65 as cited by the Examiner.) Appellant argues that modifying the retrofit plug (2650) of Sharood et al with the teachings of Wiggs would require that the refrigeration system would be undesirably shut off, thereby contributing to a more rapid warming of the refrigerator

compartment rather than simply warning of the possible problem as intended by the system of Sharood.

In response, the Examiner has argued that "the door open condition is just one of the parameters disclosed by Sharood et al in the specification and has not been used in the rejection." (See Examiner's Answer, p. 6.) However, "[a] prior art reference must be considered in its entirety, i.e. as a whole, including portions that would lead away from the claimed invention." *W.L. Gore & Assoc., inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), M.P.E.P. 2141.02 VI. Accordingly, it is improper for the Examiner to ignore the disclosed function of Sharood et al in making the combination since the combination renders the system of Sharood et al inoperable for its intended purpose. Namely, the problem of a door open condition would be exaggerated by the Examiner's proposed modification since Wiggs teaches turning off the compressor under certain conditions.

Please charge any deficiency or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

Dated: December 22, 2006

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